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EXAMINER	
OKORONKWO, CHINWENDU C	

ART UNIT	PAPER NUMBER
2436	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	**Application No.** 10/681,121	**Applicant(s)** MOON, HAN	
	Examiner CHINWENDU C. OKORONKWO	**Art Unit** 2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _21 August 2008_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1 and 3-20_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1 and 3-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to communications filed on 08/21/2008, the Examiner acknowledges the amendments made to the claims and have both considered and applied them to the claims.

The following claims, claims 1, 3-20 are presented for examination.

Response to Remarks/Arguments

2. Applicant's remarks/arguments dated 08/21/2008, have been fully considered but they are moot in view of new ground(s) for rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3 and 15-20 are rejected under 35 U.S.C. 103(a) as being disclosed by Iwafune et al. (US Patent No. 5,880,720 *hereinafter* Iwafune) in view of Deniau et al. (US Patent Application Publication No. 2002/0029382 A1 *hereinafter* Deniau)

Regarding claims 1, Iwafune, discloses a user certificate method for data broadcasting comprising the steps of:

- inputting on the remote control device a sequence of keys for user certification, wherein the sequence of the keys includes a user ID and a password (col. 19 lines 15-18 – "the remote control switch simultaneously transmits the personal ID" and col. 22 lines 28 - 42 – "a password is input from the remote control switch");
- extracting a program title from an Electronic Program Guide information received from a broadcasting station in response to the input code collection starting key (col. 7 lines 8-17 – "television program database");
- inputting a code collection end key on the remote control device after the inputting of the sequence of keys is finished (col. 13 lines 14-17 – "each interactive television adds the television program ID, the television ID, and the interactive header to response data and transmits the response data to the response server" the television Id is equated to the claims user code);
- storing a record having the user code, the program title and the sequence of keys in a code certificate list information, whereby the user code can be used to retrieve the user ID and password associated with the user code for user certification (col. 6 lines 38-50, col. 6 lines 59-65 and col. 19 lines 35-47 – "pieces of authentication information are classified in accordance with the television ID. A plurality of personal Ids can be set for one

television ID, and various pieces of authentication information are previously set for each personal ID ... authentication information consists of the password.”).

Iwafune is silent in disclosing the following, however Deniau does disclose:

- inputting a code recollection starting key on a remote control device during a user watches a data broadcasting (0058 – ”presses a button of the remote control, indicating that he wants to lock the program to which he is connected"); and
- inputting, by the user, a user code after inputting the code collection end key (0058 – “entering a code … this code may for example be identical to a code already present in the decoder”).

It would have been obvious for one of ordinary skill in the art to have been motivated to combine the inventions of Iwafune with that of Deniau as both are directed towards television program control. The motivation for the combination is provided by Deniau which recites the invention “aim is chieved by a digital receiver for controlling access to audio-visual programmes comprising a user interface with the receiver, this interface comprising means for triggering locking of the programme currently being displayed” (0039).

Regarding claim 3, Iwafune, discloses the method as claimed in claim 1, further comprising the steps of:

- querying whether the user uses the same user ID and password for all broadcasting programs (col. 20 line 44 – col. 22 line 3 – "authentication processing application is instructed to extract the personal information such as the name and address of each individual who has" made and input or request and "television ID added to each response data … also the personal ID indicating the individual who has actually input the response"); and
- setting a flag representing use of the same user ID and password for all the broadcasting programs if the querying step indicates that the same user ID and password are to be used for all broadcasting programs (Figure 17, col. 19 lines 5-18 and col 22 lines 50-65 – "whether the password registered in the authentication information database agrees with the password added to the response data is checked." If the two passwords agree, it is determined that the order for an article is from the person himself or herself, and so the order is accepted. If the two passwords disagree … order is rejected.").

Regarding claim 15, Iwafune discloses the method for providing a user authentication used in digital broadcasting, comprising:

- prestoring, at a user's device, code certificate, list information including a user ID and a password for use authentication and a user code, all associated with the user (col. 20 line 44 – col. 22 line 3 – "authentication processing application is instructed to extract the personal information such as the name and address of each individual who has" made and input or request and "television ID added to each response data … also the personal ID indicating the individual who has actually input the response"); and
- transmitting the retrieved user 113 and password from the user's device to a user certificating device for the user authentication, whereby the user can view digital broadcasting when the user authentication indicates that the user who input the user code is authorized to view the digital broadcasting (Figure 17, col. 19 lines 5-18 and col 22 lines 50-65 – "whether the password registered in the authentication information database agrees with the password added to the response data is checked." If the two passwords agree, it is determined that the order for an article is from the person himself or herself, and so the order is accepted. If the two passwords disagree … order is rejected.").

Iwafune is silent in disclosing receiving by the user's device, a user code input by the user for user authentication wherein the user code is inputted by the user in place of the user ID and the password, the user code containing one or more numerals and/or characters; retrieving, by the user's device, the user ID and the password associated with the input user code from the code certificate list information, however Deniau does provide such a disclosure (0058 – “entering a code … this code may for example be identical to a code already present in the decoder”).

It would have been obvious for one of ordinary skill in the art to have been motivated to combine the inventions of Iwafune with that of Deniau as both are directed towards television program control. The motivation for the combination is provided by Deniau which recites the invention “aim is chieved by a digital receiver for controlling access to audio-visual programmes comprising a user interface with the receiver, this interface comprising means for triggering locking of the programme currently being displayed” (0039).

Regarding claim 16, Iwafune discloses the user’s device is a set top box (Fig. 3 element 22).

Regarding claim 17, Iwafune discloses code certificate list information further stores therein at least one program information in association with the user code, thc program information identifying a program (col. 20 line 44 – col. 22 line 3 – “authentication processing application is instructed to extract the personal information such as the name and address of each individual who has” made and input or request and “television ID added to each response data … also the personal ID indicating the individual who has actually input the response”);

Regarding claim 18, Iwafune discloses a device for providing a user authentication used in digital broadcasting, comprising:

- a storage unit prestore therein code certificate list information including a user ID and a password for user authentication and a user code all associated with a user of the device (col. 20 line 44 – col. 22 line 3 – “authentication processing application is instructed to extract the personal information such as the name and address of each individual who has” made and input or request and “television ID added to each response data … also the personal ID indicating the individual who has actually input the response”);
- transmit the retrieved user ID and password to a broadcasting station for the user authentication, wherein the user code is inputted by the user for user authentication in place of the user ID and the password, the user code containing one or more numerals and/or characters, whereby the user can view digital broadcasting when the user certification indicates that the user who input the user code is auflaorized to view the digital broadcasting (Figure 17, col. 19 lines 5-18 and col 22 lines 50-65 – “whether the password registered in the authentication information database agrees with the password added to the response data is

checked.” If the two passwords agree, it is determined that the order for an article is from the person himself or herself, and so the order is accepted. If the two passwords disagree … order is rejected.”).

Iwafune is silent in disclosing a controller to receive a user code input by the user for user authentication, to retrieve the user ID and the password associated with the input user code from the code certificate list information, however Deniau does provide such a disclosure (0058 – “entering a code … this code may for example be identical to a code already present in the decoder”).

It would have been obvious for one of ordinary skill in the art to have been motivated to combine the inventions of Iwafune with that of Deniau as both are directed towards television program control. The motivation for the combination is provided by Deniau which recites the invention “aim is chieved by a digital receiver for controlling access to audio-visual programmes comprising a user interface with the receiver, this interface comprising means for triggering locking of the programme currently being displayed” (0039).

Regarding claim 19, Iwafune discloses the user’s device is a set top box (Fig. 3 element 22).

Regarding claims 20, Iwafune, discloses the user certificate system wherein the device is a set-top box and the program information identifying a program (col. 6 lines 38-46 and 66-67 – “television program ID of the television program” and "television program database").

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwafune (US Patent No. 5,880,720 *hereinafter* Iwafune) and further in view of Sakata (US Patent No. 7,110,018 *hereinafter* Sakata).

Regarding claim 4, Iwafune, discloses a user certificate method for data broadcasting comprising the steps of:

- (b) inputting, by a user, a user code after the code shortcut key is inputted (col. 2 lines 32-46, col. 18 lines 61-67, col. 19 lines 1-25 and Figure 17 and col. 16 lines 1-16 –“mode switching key for switching valid and invalid states of an interactive mode, and directions keys and an OK key”);

(c) determining existence of the input user code in a code certificate list information (col. 6 lines 38-50, col. 6 lines 59-65 and col. 19 lines 35-47 – "authentication information database");

(d) if the input user code exists in the code certificate table, reading program titles associated with the user code from the code certificate list information, and determining whether any program title associated with the user code is the same as the program title of a program being watched by the user (col. 19 lines 36-47 and col. 20 lines 11-27);

(e) if same program title exists, reading sequence of keys associated with the user code and the program title from the code certificate list infromation, wherein the sequence of keys includes a user ID and a password (col. 19 lines 36-47); and

(f) transferring the user ID and the password of the sequence of keys associated with the user code to a broadcasting station (col. 20 lines 11-27).

Iwafune is silent in disclosing inputting a code shortcut key on a remote control device while watching data broadcasting (he does implicitly hint towards such an analogous element in column 18 lines 19-23), however, Sakata does disclose such a limitation (col. 1 lines 26-37, specifically lines 31-34 of Sakata).

It would have been obvious to one of ordinary skill in the art, at the time of the invention to combine the television system of Iwafune with the communication terminal of Sakata. Sakata provides motivation for this combination in the recitation of the "since a remote controller is used as the main control system of each device, it is unsuitable for complicated input operation … the operability of the input is bad." Therefore, motivation for modifying the television system of Iwafune and its remote control (Figure 17) with the communication terminal of Sakata and its remote control (col. 1 lines 31-34) is clear. The shortcut key of the remote controller disclosed by Sakata would benefit the television system of Iwafune in that the television remote control would be able to handled "complicated input" such as the key sequence claimed within the instant application.

Regarding claim 5, Iwafune, is silent in disclosing the method as claimed in claim 4, further comprising the step of displaying a message on a screen that indicates non-existence of the user code that is input by the user in a case where there is no user code in the code certificate list information that matches the user code input by the user as a result of the determination in step (c). However, it would have been obvious to provide a non-affirmative response/message to the user if a transaction does not complete as intended. Iwafune provides motivation for the obviousness modification reasoning in the recitation of col. 17 lines 62-65 in which a screen is displayed after transaction establishment information is received, which can contain either be a positive or negative message. Therefore, motivation for modifying the television system of Iwafune is clear. Such a message would benefit the television system of Iwafune by increasing user satisfaction - keeping users informed of the status of operations – thus making the system as a whole more user friendly.

Regarding claim 6, Iwafune, is silent in disclosing the user method as claimed in claim 4, further comprising the step of displaying a message on a screen that indicates no program title associated with the user code is the same as the program title being watched by the use in a case where there is no same program as a result of the determination in step (d). However, it would have been obvious to provide a non-affirmative response/message to the user if a transaction does not complete as intended. Iwafune provides motivation for the obviousness modification reasoning in the recitation of col. 17 lines 62-65 in which a screen is displayed after transaction establishment information is received, which can contain either be a positive or negative message. Therefore, motivation for modifying the television system of Iwafune is clear. Such a message would benefit the television system of Iwafune by increasing user satisfaction - keeping users informed of the status of operations – thus making the system as a whole more user friendly.

Regarding claim 7, Iwafune, discloses a user certificate method for data broadcasting comprising the steps of:

- (b) inputting, by a user, a user code after the code shortcut key is inputted (col. 2 lines 32-46, col. 18 lines 61-67, col. 19 lines 1-25 and Figure 17 and col. 16 lines 1-16 –“mode switching key for switching valid and invalid states of an interactive mode, and directions keys and an OK key”);

  (c) determining existence of the input user code in a code certificate list information (col. 6 lines 38-50, col. 6 lines 59-65 and col. 19 lines 35-47 – “authentication information database”);

  (d) if the input user code exists in the code certificate table, reading program titles associated with the user code from the code certificate list information, and determining whether any program title associated with the user code is the same as the program title of a program being watched by the user (col. 19 lines 36-47 and col. 20 lines 11-27);

  (e) if same program title exists, reading sequence of keys associated with the user code and the program title from the code certificate list infromation, wherein the sequence of keys includes a user ID and a password (col. 19 lines 36-47); and

  (f) transferring the user ID and the password of the sequence of keys associated with the user code to a broadcasting station (col. 20 lines 11-27).

Iwafune is silent in disclosing inputting a code shortcut key on a remote control device while watching data broadcasting (he does implicitly hint towards such an analogous element in column 18 lines 19-23), however, Sakata does disclose such a limitation (col. 1 lines 26-37, specifically lines 31-34 of Sakata).

It would have been obvious to one of ordinary skill in the art, at the time of the invention to combine the television system of Iwafune with the communication terminal of Sakata. Sakata provides motivation for this combination in the recitation of the "since a remote controller is used as the main control system of each device, it is unsuitable for complicated input operation … the operability of the input is bad." Therefore, motivation for modifying the television system of Iwafune and its remote control (Figure 17) with the communication terminal of Sakata and its remote control (col. 1 lines 31-34) is clear. The shortcut key of the remote controller disclosed by Sakata would benefit the television system of Iwafune in that the television remote control would be able to handled "complicated input" such as the key sequence claimed within the instant application.

Regarding claim 8, Iwafune, is silent in disclosing the user method as claimed in claim 4, further comprising the step of displaying a message on a screen that indicates no program title associated with the user code is the same as the program title being watched by the use in a case where there is no same program as a result of the determination in step (d). However, it would have been obvious to provide a non-affirmative response/message to the user if a transaction does not complete as intended. Iwafune provides motivation for the obviousness modification reasoning in the recitation of col. 17 lines 62-65 in which a screen is displayed after transaction establishment information is received, which can contain either be a positive or negative message. Therefore, motivation for modifying the television system of Iwafune is clear. Such a message would benefit the television system of Iwafune by increasing user satisfaction - keeping users informed of the status of operations – thus making the system as a whole more user friendly.

Claim Rejections - 35 USC § 103

5. Claims 9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwafune (US Patent No. 5,880,720 *hereinafter* Iwafune), Sakata (US Patent No. 7,110,018 *hereinafter* Sakata), and further in view of Jung (US Patent No. 6,483,553 *hereinafter* Jung).

Regarding claim 9, Iwafune, discloses a user certificate system for a data broadcasting comprising:

- a first memory for configured to store code certificate list information for writing a record having a user code, a program title, and a sequence of keys thereon while watching the digital TV receiver, wherein the user code is input by a user, and the sequence of keys include a user ID and a password (Figure 16 element 84);
- a second memory configured to store a flag indicating whether the same user ID and password are used for all broadcasting program (Figure 16 element 83);
- a settop box having the first and second memories and capable of extracting a program title from Electronic Program Guide information received from a broadcasting station (col. 7 lines 8-17 of Iwafune); and
- a remote control device including, a code collection starting key for starting application (Figure 17 of Iwafune),
- a code recollection end key for ending the application of the user ID and the password (col. 2 lines 32-46, col. 18 lines 61-67 and col. 19 lines 1-25 of Iwafune).

Iwafune in view of Sakata is silent in disclosing a digital TV receiver configured to receive a digital TV broadcasting, however Jung does disclose such a limitation (col. 5 lines 65-67 and col. 6 lines 1-4 of Jung).

It would have bee obvious to one of ordinary skill in the art, at the time of the invention to combine the television system of Iwafune in view of the communication terminal of Sakata with the TV receiver for digital/analog combined use of Jung. Jung provides motivation for this combination in the recitation, “the digital TV broadcasting systems will use channels the present analog (radio) broadcasting systems do not use, frequently. Therefore, the digital TV broadcasting signals can be received by an existing analog TV antenna. Moreover, an output frequency band of a digital tuner is also similar to an output frequency band of a tuner of an existing analog TV receiver.” Therefore, motivation for modifying the television system of Iwafune in further view of the communication terminal of Sakata and their remote controls with the TV receiver for digital/analog combined use of Jung is clear. The digital TV receiver disclosed by Jung is would benefit the television system of Iwafune in further view of the communication terminal of Sakata in that it allows the users of the television system to receive higher quality picture and sound – thus increasing satisfaction levels. Also this modification would allow the television system communication combination to take advantage of the more modern technology of digital TV broadcasting, which will – in the very near future - become the standard form of TV broadcasting.

Iwafune is silent in disclosing a code shortcut key for carrying out a user code certificate procedure by retrieving, from the code certificate table, the user ID and the password associated with the user code input by the user (he does disclose an analogous such element in column 18 lines 19-23), however, Sakata does disclose such a limitation (col. 1 lines 26-37, specifically lines 31-34 of Sakata).

It would have been obvious to one of ordinary skill in the art, at the time of the invention to combine the television system of Iwafune with the communication terminal of Sakata. Sakata provides motivation for this combination in the recitation of the “since a remote controller is used as the main control system of each device, it is unsuitable for complicated input operation … the operability of the input is bad.” Therefore, motivation for modifying the television system of Iwafune and its remote control (Figure 17) with the communication terminal of Sakata and its remote control (col. 1 lines 31-34) is clear. The shortcut key of the remote controller disclosed by Sakata would benefit the television system of Iwafune in that the television remote control would be able to handled “complicated input” such as the key sequence claimed within the instant application.

Regarding claim 10, Iwafune, discloses the user certificate system as claimed in claim 9, wherein the first and second memories are non-volatile (col. 19 lines 36-47 and col. 20 lines 11-27).

Regarding claims 11, Iwafune, discloses the user certificate system wherein code certificate list information is stored in the users device and the device is a set-top box (col. 19 lines 5-19 – "dedicated remote control units are provided to a plurality of persons who use the same interactive television, and the personal ID of each person is set in the corresponding remote control unit" and Figure 8 element 1).

Regarding claim 12, Iwafune discloses the user's device is a set top box (Fig. 3 element 22).

Regarding claim 13, Iwafune discloses the code certificate list information is stored in a set top box (Fig. 3 element 8).

Regarding claim 14, Iwafune discloses the code certificate list information is stored in a set top box (Fig.3 element 8).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHINWENDU C. OKORONKWO whose telephone number is (571)272-2662. The examiner can normally be reached on MWF 2:30 - 6:00, TR 9:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571) 272 4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. C. O./

Examiner, Art Unit 2436

/Carl Colin/
Primary Examiner, Art Unit 2436